

Paediatric Respiratory Pathogen Report

Week 35, 28th August – 03rd September 2023

- Pathwest reported 83 paediatric RSV cases this week. Both the number of cases and the proportion positive are stable, aligning with typical levels for this time of year.
- The influenza proportion positive is stable but below the historical averages typically observed at this time of year.
- PathWest detected 28 influenza cases in paediatric patients. Of these, 24 were influenza B, 2 were influenza A/H1, 1 was influenza A/H3 and 1 was influenza A yet to be subtyped.
- Other common respiratory viruses detected in paediatric patients this week were parainfluenza (45 cases), human metapneumovirus (29) adenovirus (28 cases), rhinovirus (24 cases), and SARS-CoV-2 (2 cases).

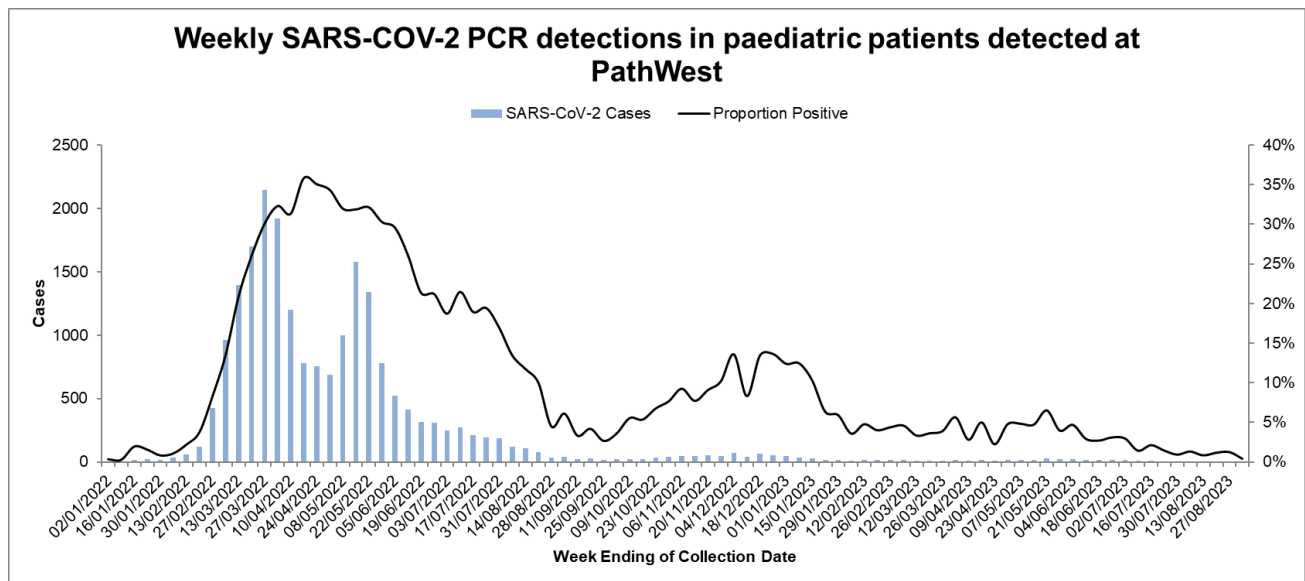


Figure 1: Weekly SARS-CoV-2 detections in hospital attending patients and community paediatric patients. Data is for PCR samples tested by PathWest only.

SARS-CoV-2 cases and proportion positive in paediatric patients remain low.

Data is representative of all patients attending a hospital (public or private) in Western Australia, for which a respiratory sample was collected and tested at a PathWest laboratory.

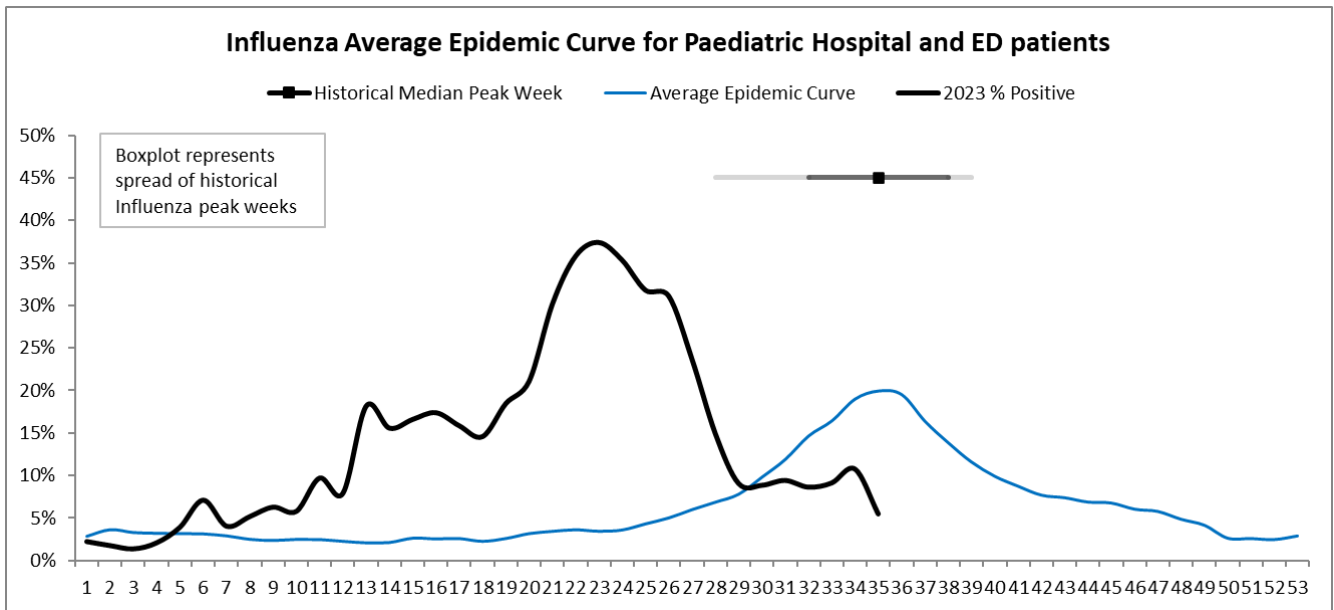


Figure 2: The current season plotted against the Paediatric Influenza Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

Influenza proportion positive (5%) is below levels historically observed at this time of year.

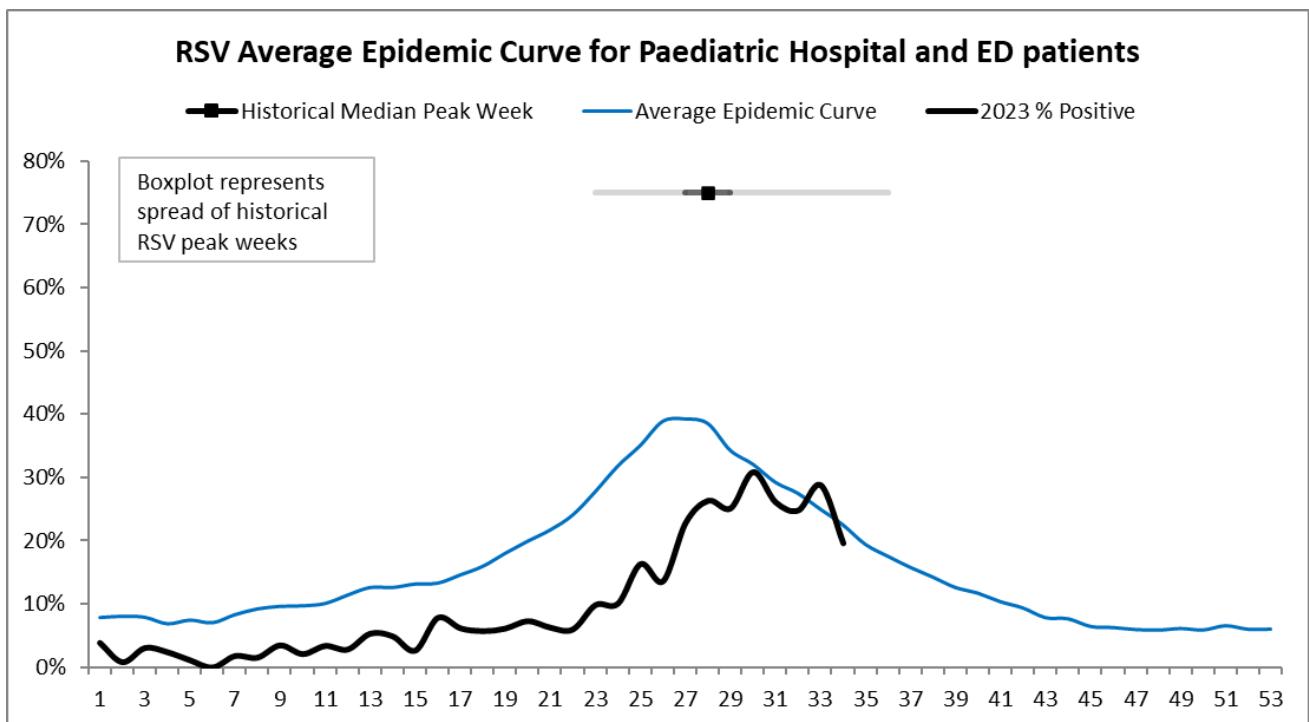


Figure 3: The current season plotted against the Paediatric RSV Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

The RSV proportion positivity (16.2%) is consistent with levels historically seen at this time of the year.

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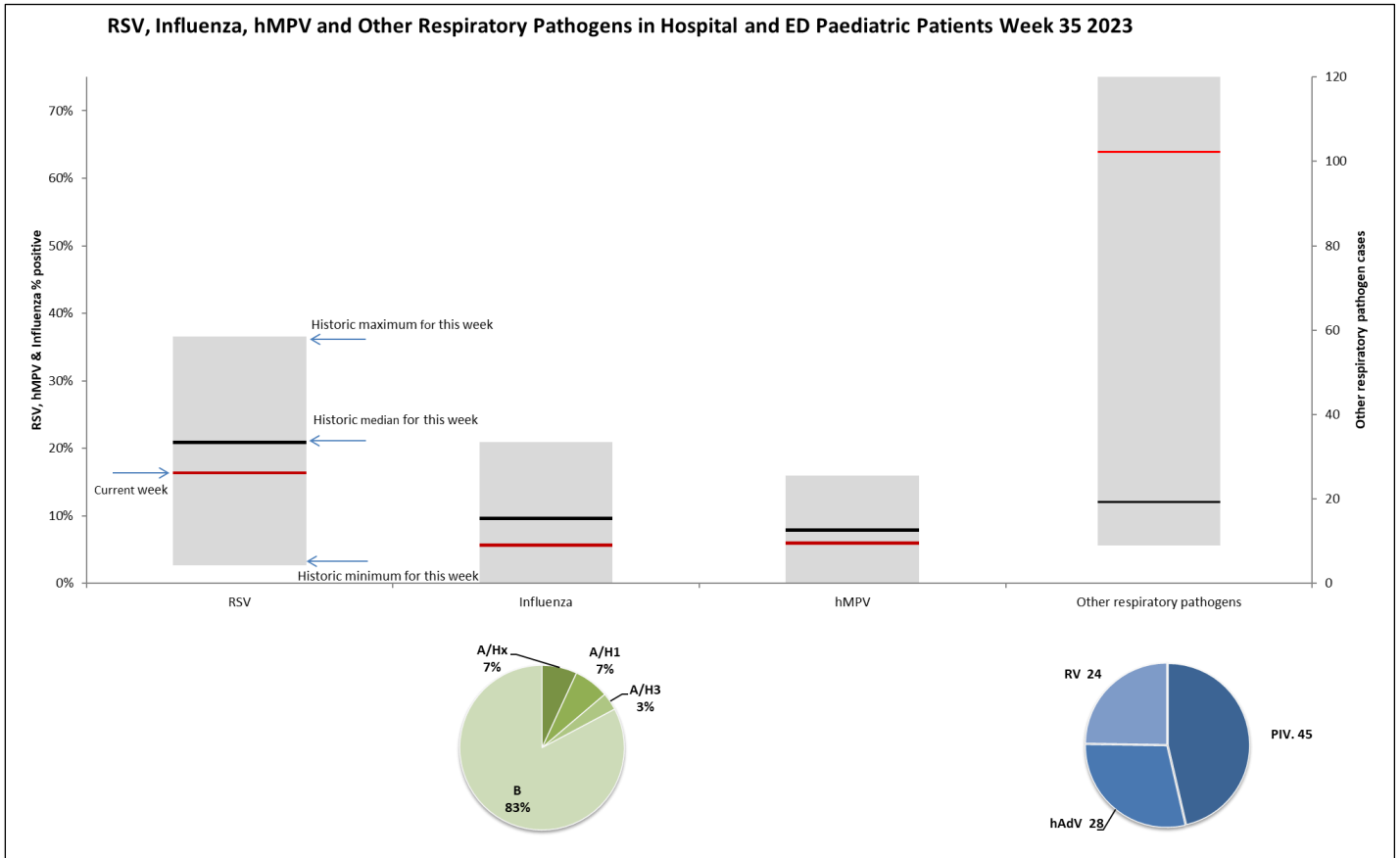


Figure 4: Proportion positive (RSV, hMPV & influenza) or cases (other respiratory pathogens) for the current week (red line) plotted against the historic range (grey box) and median (black line) for this week. Pie charts represent the breakdown of influenza subtypes and the count of other respiratory pathogens. Data represents hospitalised and ED paediatric patients tested by PathWest. Historic data is for years 2007-2019. Please note: Due to the escalation of rapid PCR testing, the number of influenza and RSV positive samples which do not receive a subtyping test has increased.

The Influenza proportion positive (5.3%) was below the historic median (9.4%) for this week. The RSV proportion positive (19.7%) also falls below the historical median of 22.3%. Other respiratory viruses, mainly adenovirus (hAdV), parainfluenza (PIV), and rhinovirus (RV), exceeded their historic median levels. Testing for these viruses is currently at an all-time high. Testing for these viruses is currently higher than it has been in previous years.

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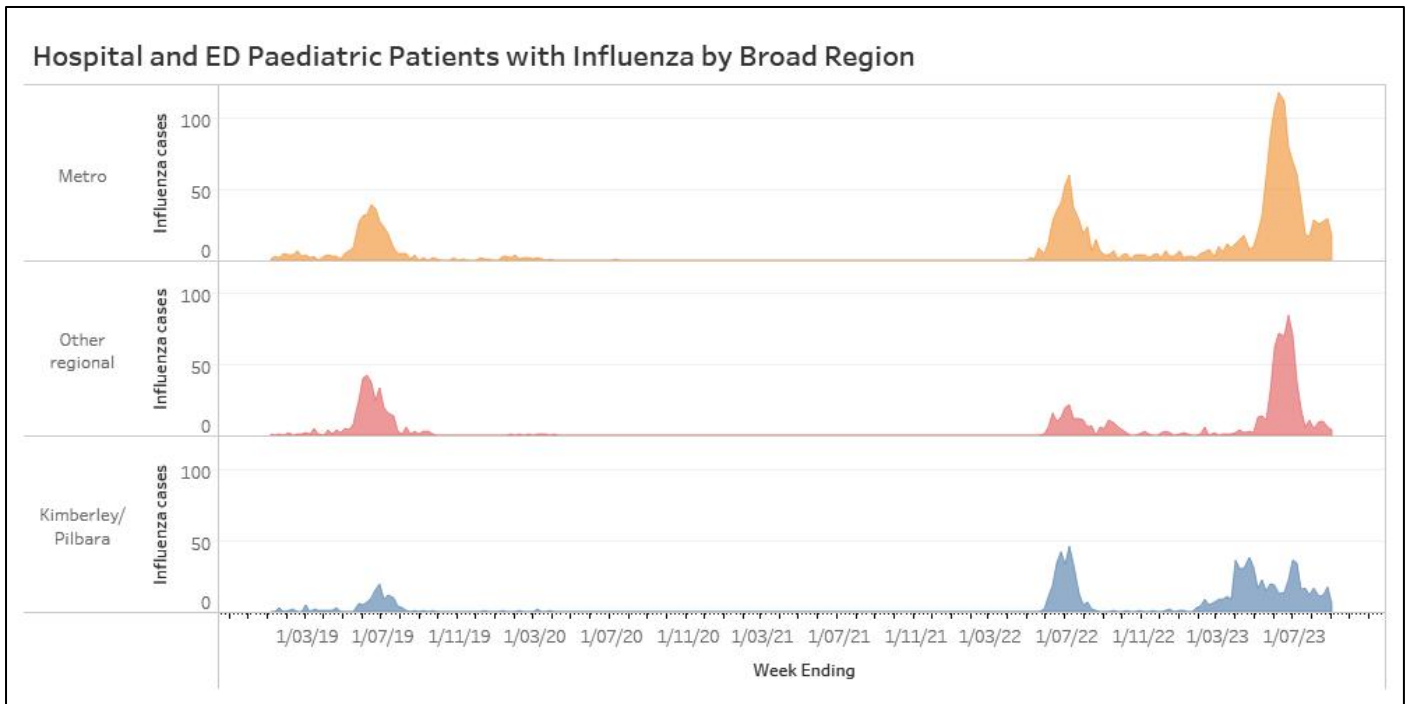


Figure 5: Hospital attending paediatric patients with influenza in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

This week, out of 44 paediatric influenza cases, 29 were from the Metro area. The rest were distributed as follows: 10 from Pilbara, 4 from the Southwest, and 1 from the Kimberley.

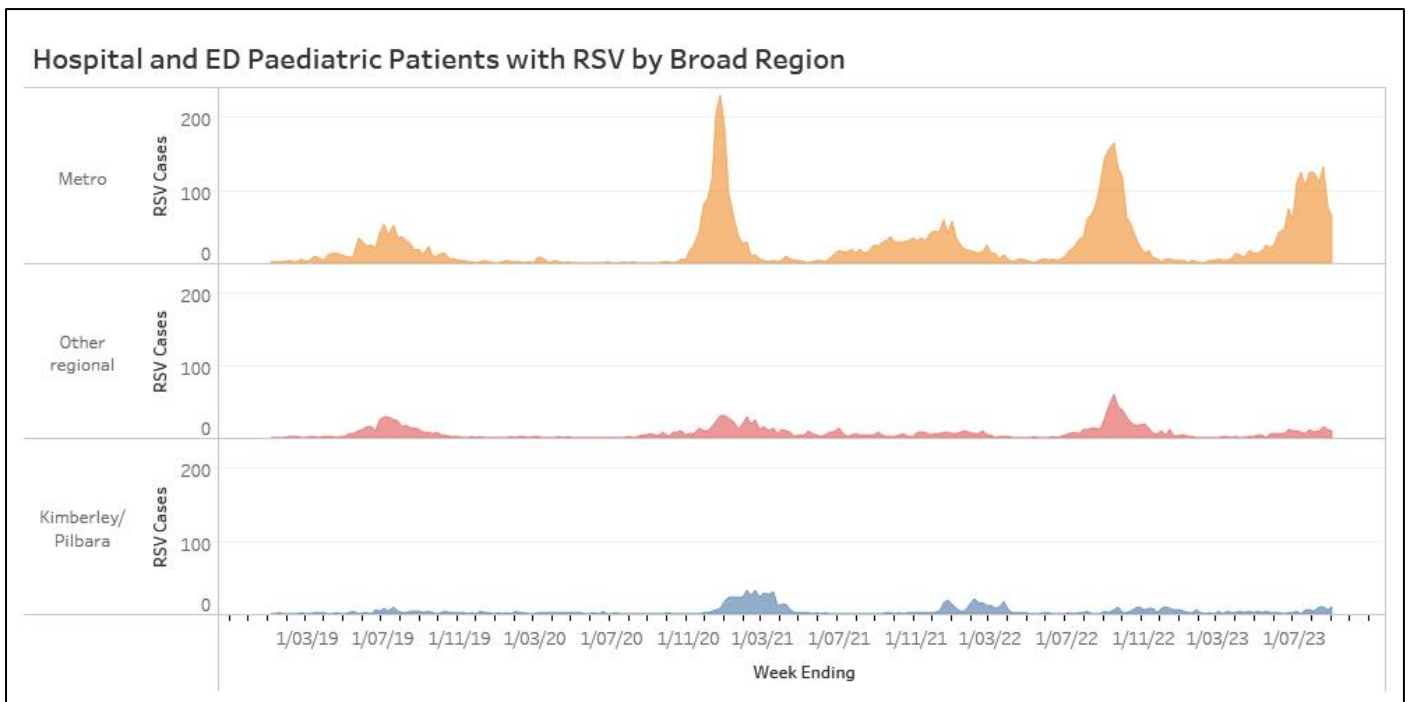


Figure 6: Hospital attending paediatric patients with RSV in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

This week, of the 83 paediatric RSV cases, 63 originated from the Metro area. The remaining cases were distributed as follows: 8 from Pilbara, 4 from the Midwest, 3 from the Wheatbelt, 2 each from the Southwest and Kimberley, and 1 from the Goldfields.

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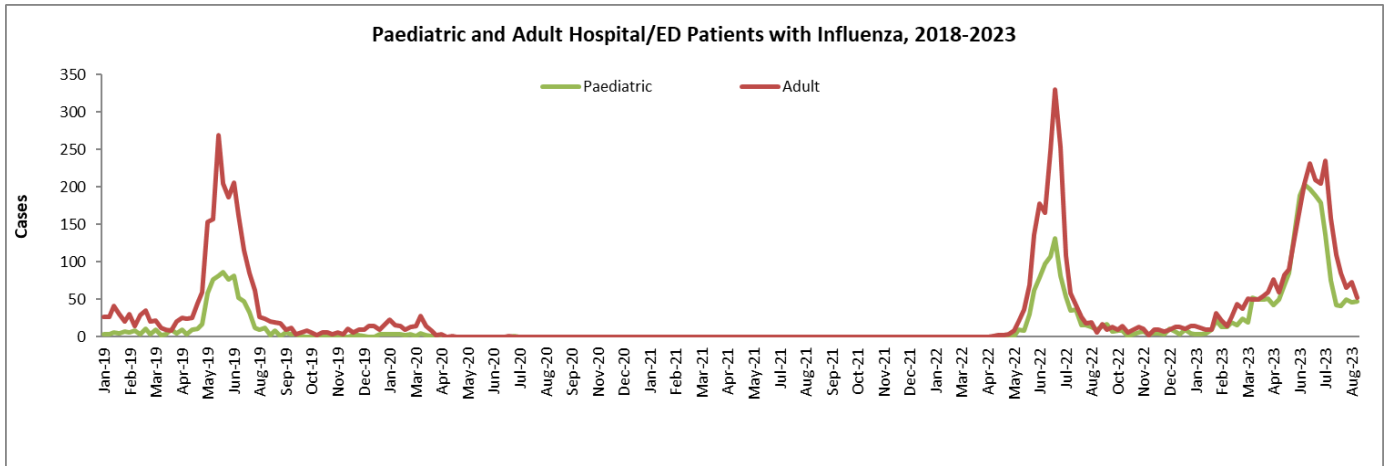


Figure 7: Paediatric and adult hospital attending patients with influenza, 2018-2023.

There were 28 children and 31 adults with influenza who attended a hospital.

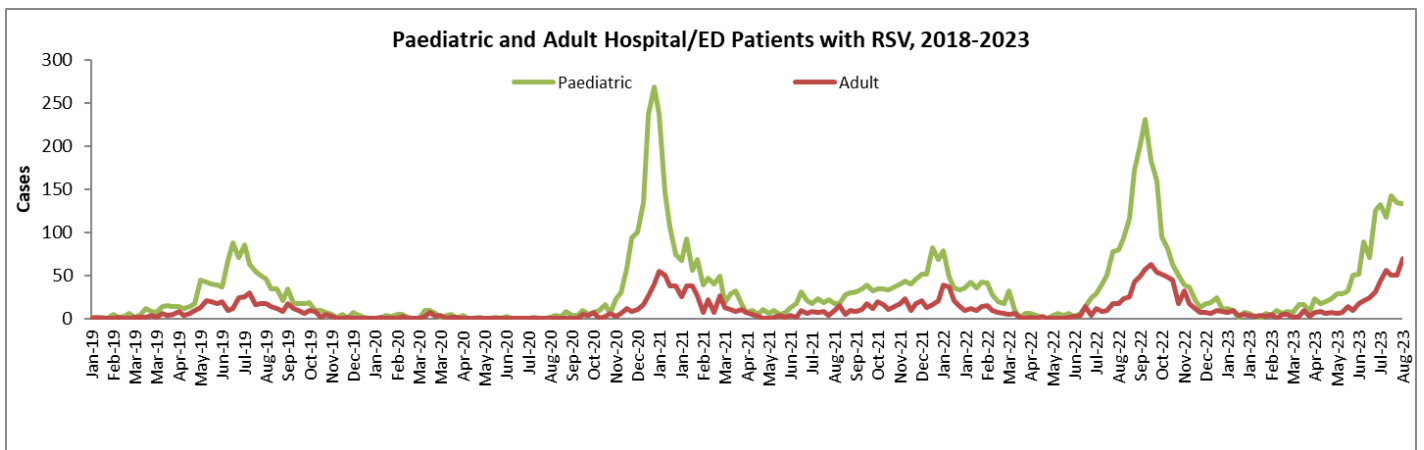


Figure 8: Paediatric and adult hospital attending patients with RSV, 2018-2023.

There were 83 children and 60 adults with RSV who attended a hospital.

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